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Winter Wheat Test Results for South Dakota, 2002

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The statewide yield, bushel weight, and protein averages for the varieties tested are in table 3. In addition, many of the variety characteristics including prevalent disease reactions can be seen in table 4.

Table 1. Winter wheat variety recommendations for year 2003.

Recommended		Acceptable/Promising	
Variety	Crop adaptation area	Variety	Crop adaptation area
Alliance@	3,4,5,6	Crimson	1,2,4,6,7
Arapahoe@	1*,4,5,6,7*	Nekota	1*,3,4,5,6,7*
Harding@	1,2,4,7	Trego (white)	6,7*
Millennium	1*,4,5,6,7		
Tandem	1*,4,5,6,7		
Wesley	1*,4,5,6,7		

@ Plant Variety Protection (PVP) applied for or received; seed sales are restricted to classes of certified seed.

* Plant into protective cover.

Table 2. Winter wheat variety performance testing yield averages 2000-2002.

Variety	Location									
	Brookings		So. Shore		Highmore		Selby		Platte	
	'02	3-yr	'02	3-yr	'02	3-yr	'02	3-yr	'02	3-yr
<i>Hard red:</i>										
2137	54	50	38	.	22	42+	28+	41+	55+	.
Alliance	60+	64+	38	.	27	50+	25	43+	55+	.
Arapahoe	62+	66+	45+	.	31+	50+	29+	43+	56+	.
CDC Falcon	64+	.	41	.	37+	.	30+	.	55+	.
Crimson	58	59	38	.	32+	46+	23	36	49	.
Expedition	58	63+	42+	.	26	47+	28+	46+	56+	.
Harding	59+	61+	45+	.	31+	44+	28+	42+	52	.
Jagalene	66+	.	34	.	33+	.	32+	.	56+	.
Jagger	43	44	26	.	31+	44+	25	34	58+	.
Jerry	63+	.	44+	.	35+	.	22	.	52	.
Millennium	60+	73+	49+	.	33+	50+	31+	45+	53+	.
Nekota	57	60+	39	.	25	43+	25	41+	54+	.
Ransom	63+	60+	39	.	29	45+	21	35	46	.
Scout 66	56	47	31	.	26	40+	22	31	48	.
Stanton	57	.	37	.	25	.	27+	.	52	.
Tandem	58	59	41	.	32+	47+	29+	42+	55+	.
Wahoo	63+	69+	43+	.	35+	46+	29+	41+	55+	.
Wesley	62+	67+	39	.	26	48+	24	43+	59+	.
<i>Hard white:</i>										
Avalanche	57	.	23	.	28	.	24	.	46	.
NuPlains	63+	61+	36	.	29	47+	24	41+	50	.
Trego	62+	65+	42+	.	26	45+	24	39+	53+	.
Test avg.*:	60	61	39	.	29	46	26	40	53	.
LSD (5%) :	6	14	7	.	8	NS	6	9	7	.
CV (%) #:	7	12	12	.	19	13	16	21	9	.

+ Entry is in top-yield group.

* Test average - only released varieties are reported.

A measure of experimental error; a value of 16% or less is best.

Table 2. Winter wheat variety performance testing yield averages (Continued).

Variety	Location									
	Wall		Hayes		Martin		Oelrichs		Tripp Co.	
	'02	3-yr	'02	3-yr	'02	3-yr	'02	3-yr	'02	3-yr
<i>Hard red:</i>										
2137	31	45+	27	.	46	53+	44	57+	29	44+
Alliance	32+	47+	33	.	51	56+	44	62+	41+	54+
Arapahoe	32+	46+	29	.	64+	61+	44	61+	23	46+
CDC Falcon	31	.	29	.	60+	.	40	.	37+	.
Crimson	27	45+	26	.	42	52	40	53	23	41
Expedition	32+	43+	31	.	54	56+	45	61+	31	51+
Harding	28	45+	30	.	51	50	41	55	28	47+
Jagalene	31	.	37+	.	66+	.	49+	.	41+	.
Jagger	28	41	32	.	51	47	41	59+	33	40
Jerry	26	.	31	.	51	.	38	.	27	.
Millennium	32+	47+	34	.	61+	58+	50+	61+	25	44+
Nekota	30	42	35+	.	60+	57+	46+	59+	27	44+
Ransom	24	44+	28	.	43	47	41	52	31	44+
Scout 66	28	44+	29	.	44	46	44	56+	28	40
Stanton	31	.	30	.	55	.	46+	.	29	.
Tandem	33+	44+	33	.	54	55+	45	57+	33	50+
Wahoo	35+	50+	33	.	55	54+	48+	63+	20	43
Wesley	32+	49+	34	.	63+	61+	46+	61+	30	52+
<i>Hard white:</i>										
Avalanche	29	.	31	.	48	.	47+	.	45+	.
NuPlains	29	44+	27	.	49	56+	40	56+	27	40
Trego	29	44+	31	.	49	51	44	58+	38+	51+
Test avg.*:	30	45	31	.	52	54	44	58	31	46
LSD (5%) \$:	4	7	5	.	15	8	4	7	9	10
CV (%) #:	11	11	2	.	20	17	7	8	22	15

+ Entry is in top-yield group.

* Test average - only released varieties are reported.

A measure of experimental error; a value of 16% or less is best.

Table 3. Agronomic performance averages for entries in 2002.

Variety	Heading Difference days	Yield-bu/a		Bushel Weight lb	Protein pct+
		2002	3-yr		
<i>Hard red:</i>					
2137	3	37	48	57	13.9
Alliance	2	41	53	57	13.6
Arapahoe	3	41	53	57	15.0
CDC Falcon	4	42	.	55	14.7
Crimson	5	36	47	57	15.0
Expedition	0	40	53	58	14.1
Harding	5	39	50	57	15.1
Jagalene	4	44	.	60	14.2
Jagger	0	37	45	58	14.8
Jerry	6	39	.	56	15.2
Millennium	4	43	54	58	14.3
Nekota	2	40	50	58	14.0
Ransom	5	36	48	55	14.8
Scout 66	2	35	43	59	14.3
Stanton	1	39	.	58	13.8
Tandem	4	41	50	59	14.5
Wahoo	3	42	52	56	14.7
Wesley	2	41	54	57	14.8
<i>Hard white:</i>					
Avalanche~W	2	38	.	59	14.0
NuPlains~W	3	37	49	60	14.5
Trego~W	3	40	51	59	13.9
State test avg.:		39	48	58	14.4

+ Locations included are Brookings, So. Shore, Highmore, Wall, Tripp Co., Tripp, and Selby.

Table 4. Origin, disease reaction, and other traits for winter wheat entries tested in 2002.

Variety	Origin	Lodging Res+	Baking Qty+	Winter Wheat Hardiness+	Disease Reaction				
					Streak Msc+	Tan Spot+	Rust+ Lf	St	PVP* Status
<i>Hard red:</i>									
2137	KS-95	Exc	Good	F-Good	MR	R	S	MS	Yes
Alliance	NE-93	Good	Acc	Good	MS	VS	S	MS	Yes
Arapahoe	NE-88	Fair	Good	G-Exc	S	S	MS	MR	Yes
CDC Falcon	SK-98	Good	-	G-Exc	-	-	-	R	Canada
Crimson	SD-97	Good	Good	G-Exc	MR	R	S	MS	Yes
Expedition	SD-02	Fair	Acc	G-Exc	-	MS	MS	R	**
Harding	SD-99	F-Good	Acc	Exc	MR	MR	MR	MR	Yes
Jagalene	AP-03	Exc	Exc	Good	MS	MR	S	S	**
Jagger	KS-94	Good	Exc	Poor	MR	R	S	MS	Yes
Jerry	ND-01	Fair	Good	Exc	-	-	S	R	No
Millennium	NE-99	Good	Acc	F-Good	S	MS	MS	MR	Yes
Nekota	NE/SD-94	Good	Good	Good	MS	MR	S	MR	No
Ransom	ND-98	Fair	Poor	Exc	S	-	MR	MR	Yes
Scout 66	NE-66	Poor	Good	F-Good	MS	MR	S	S	No
Stanton	KS-00	G-Exc	Acc	Fair	-	-	S	R	**
Tandem	SD-97	F-Good	Exc	Good	S	S	S	MR	Yes
Wahoo	NE/WY-01	Good	-	Good	S	-	S	R	Yes
Wesley	NE-98	Exc	Acc	G-Exc	S	MR	MS	R	No
<i>Hard white:</i>									
Avalanche	CO-01	Poor	Poor	Poor	-	-	S	MR	-
NuPlains	NE-99	Good	Acc	Good	S	S	MS	MS	Yes
Trego	KS-99	F-Good	Exc	F-Good	S	MS	MS	R	Yes

* Plant Variety Protection(PVP), Title V, Certification Option, to be sold by variety name only as a class of certified seed.

**PVP application pending/anticipated.

+ Table key: F= fair, G= good, Acc= acceptable, Exc= excellent, S= susceptible, MS= moderately susceptible, MR = moderately resistant, R= resistant.

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